

=> d his full

(FILE 'HOME' ENTERED AT 13:26:33 ON 27 AUG 2005)

FILE 'REGISTRY' ENTERED AT 13:26:41 ON 27 AUG 2005

L1 STRUCTURE UPLOADED

D

L2 0 SEA SSS SAM L1

L3 1 SEA SSS FUL L1

FILE 'CAPLUS' ENTERED AT 13:27:27 ON 27 AUG 2005

L4 1 SEA ABB=ON PLU=ON L3

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 AUG 2005 HIGHEST RN 861902-61-6

DICTIONARY FILE UPDATES: 26 AUG 2005 HIGHEST RN 861902-61-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*

* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE CAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

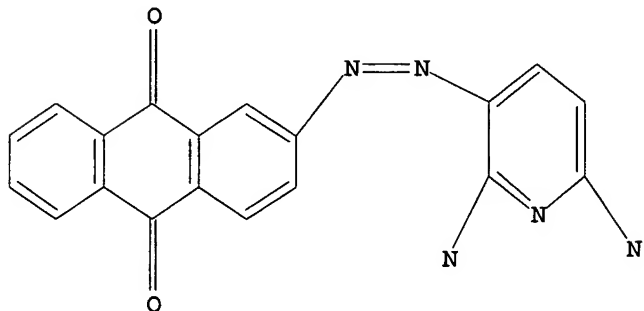
FILE COVERS 1907 - 27 Aug 2005 VOL 143 ISS 10

FILE LAST UPDATED: 26 Aug 2005 (20050826/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que 14 stat
L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 1 SEA FILE=REGISTRY SSS FUL L1
L4 1 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d bib abs hitstr

L4 ANSWER 1 OF 1 CAPIUS COPYRIGHT 2005 ACS on STN
 AN 2003:972147 CAPIUS
 DN 140:17593
 TI Anthraquinone-azo dyes, their production and their use
 IN Tzikas, Athanasios; Clement, Antoine; Lauk, Urs
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003102083	A1	20031211	WO 2003-EP5562	20030527
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, T, TH, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2483471	AA	20031211	CA 2003-2483471	20030527
BR 2003011533	A	20050222	BR 2003-11533	20030527
EP 1509573	A1	20050302	EP 2003-732478	20030527
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005182247	A1	20050818	US 2003-516440	20030527
PRAI EP 2002-405444	A	20020603		
WO 2003-EP5562	W	20030527		
OS MARPAT 140:17593				
GI				

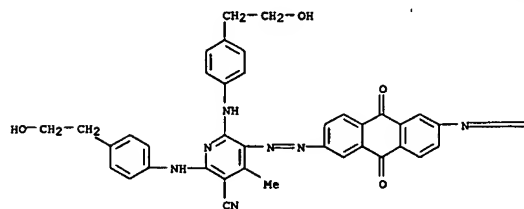
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to azo dyes (I, II, or III; R1, R2 = alkylene, arylene, aralkylene, cycloalkylene which may be interrupted by O, S, imino, carbonyloxy, or carbonamido; R3 = CN, CONH2; R4 = Me, CF3; R5, R6, R7, R8 = H, halogen, CN), to a process for their production, and to their use in a method of producing mass-colored plastics or polymeric color particles. The dyes have high tinctorial strength and fastness, especially high-temperature light fastness. In an example, 2,6-bis[4-(2-hydroxyethyl)phenylamino]-3-cyano-4-methylpyridine was prepared and coupled with tetrazotized 2,6-diaminoanthraquinone to give a diazo dye useful in the production of color filters.

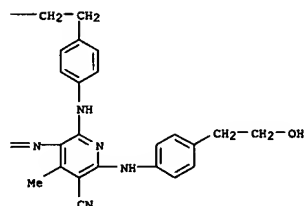
IT 631899-52-0P
 RL: IMP (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (dye; production of anthraquinone-azo dyes for use with plastics)

L4 ANSWER 1 OF 1 CAPIUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 631899-52-0 CAPIUS
 CN 3-Pyridinecarbonitrile, 5,5'-[(9,10-dihydro-9,10-dioxo-2,6-anthracenediyl)bis(azo)]bis[2,6-bis[4-(2-hydroxyethyl)phenylamino]-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A
 HO—



PAGE 1-B



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

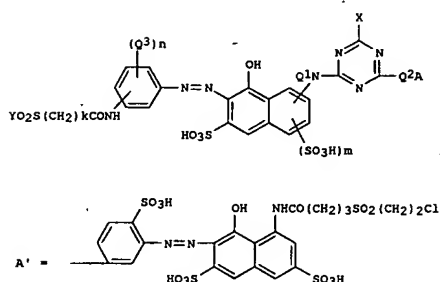
=> => d que l11 stat

L5	124	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"TZIKAS ATHANASSIOS"/AU
L6	20	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"CLEMENT ANTOINE"/AU
L7	38	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	("LAUK URS"/AU OR "LAUK URS H"/AU)
L8	164	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L5 OR L6 OR L7
L11	16	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L8 AND (ANTHRAQUINONE(L) AZO)

=> d 1-16 bib abs

L11 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:120916 CAPLUS
 DN 140:165441
 TI Reactive azo dyes, their production and their use
 IN Tsikas, Athanassios; Mueller, Bernhard; Roentgen, Georg
 PA Ciba Specialty Chemicals Holding, Inc., Switz.
 SO PCT Int. Appl., 52 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004013235	A1	20040212	WO 2003-EP7636	20030715
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1523527	A1	20050420	EP 2003-766169	20030715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI EP 2002-405446	A	20020724		
WO 2003-EP7636	W	20030715		
OS MARPAT 140:165441				
GI				



L11 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:972147 CAPLUS
 DN 140:17593
 TI Anthraquinone-azo dyes, their production and their use
 IN Tsikas, Athanassios; Clement, Antoine; Laux, Uwe
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003102083	A1	20031211	WO 2003-EP5562	20030527
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2483471	AA	20031211	CA 2003-2483471	20030527
BR 2003011533	A	20050222	BR 2003-11533	20030527
EP 1509573	A1	20050302	EP 2003-732478	20030527
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005182247	A1	20050818	US 2003-516440	20030527
PRAI EP 2002-405444	A	20020603		
WO 2003-EP5562	W	20030527		
OS MARPAT 140:17593				
GI				

* STRUCTURE-DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to azo dyes (I, II, or III; R1, R2 = alkylene, arylene, aralkylene, cycloalkylene which may be interrupted by O, S, imino, carbonyloxy, or carbamido; R3 = CN, CONH2; R4 = Me, CF3; R5, R6, R7, R8 = H, halogen, CN), to a process for their production, and to their use in a method of producing mass-colored plastics or polymeric color particles. The dyes have high tinctorial strength and fastness, especially high-temperature light fastness. In an example, 2,6-bis[4-(2-hydroxyethyl)phenylamino]-3-cyano-4-methylpyridine was prepared and coupled with tetrazotized 2,6-diaminoanthraquinone to give a disazo dye useful in the production of color filters.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

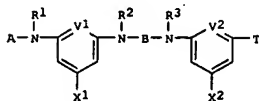
L11 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

AB Reactive dyes (I; A = monoazo, polyazo, metal complex azo, anthraquinone, phthalocyanine, formazan, dioxazine chromophore group, Q1, Q2 = H, optionally substituted C1-4-alkyl; Q3 = C1-4-alkyl, C1-4-alkoxy, halogen, sulfo; X = halogen, 3-carboxypyridin-1-yl, 3-carbamoylpyridin-1-yl, hydroxy, optionally substituted C1-4-alkoxy, optionally substituted phenoxy, optionally substituted C1-4-alkylthio, optionally substituted amino, N-heterocycle which may or may not contain further hetero atoms; Y = vinyl or vinyl-forming group; k = 2, 3, 4, 5,

6: m = 0, 1; n = 0, 1, 2 with the proviso that when A denotes a monoazo chromophore it is not directly linked to the triazinyl radical through a hydroxynaphthalenesulfonic acid coupling component and is not A') are suitable for dyeing cellulosic or nitrogen-containing fiber materials, especially cotton. I are characterized by high fastness and good application ability. In an example, 1,3-phenylenediamine-4-sulfonic acid was monoacylated with γ-(β-chloroethylsulfonyl)butyryl chloride to give a diazo component, which was coupled with a 1:1 condensate of cyanuric chloride and 1-amino-8-naphthol-3,6-disulfonic acid. The product was further condensed with an aniline azo derivative to provide a red disazo reactive dye.

L11 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:51717 CAPLUS
 DN 136:119798
 TI Printing cellulosic fiber materials without an additional fixing process step
 IN Tsikas, Athanassios; Reichert, Hans; Klier, Herbert
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002004741	A1	20020117	WO 2001-EP7362	20010628
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1299594	A1	20030409	EP 2001-953180	20010628
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004502886	T2	20040129	JP 2002-509589	20010628
US 2002032318	A1	20020314	US 2001-899439	20010705
US 6623533	B2	20030923		
US 2004055098	A1	20040325	US 2003-618922	20030714
PRAI EP 2000-810594	A	20000707		
WO 2001-EP7362	W	20010628		
US 2001-899439	A3	20010705		
OS MARPAT 136:119798				
GI				

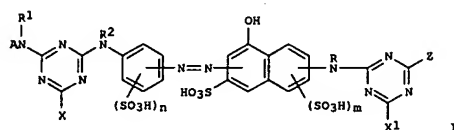


AB Printing cellulosic fiber materials comprises fiber material brought into contact with reactive dyes I, where A is the radical of a monoazo, polyazo, metal complex azo, anthraquinone, phthalocyanine, formazan or dioxazine chromophore, R1, R2 and R3 = H or unsubstituted or substituted C1-4-alkyl, X1 and X2 = halogen, B is an organic bridging member, T is a reactive radical, R4 = H, C1-4-alkyl unsubstituted or substituted by hydroxy, sulfo, sulfato, carboxy or by CN, or a radical alkR5SO2Y, where R5 = is H, OH, sulfo, sulfato, carboxy, CN, halogen, C1-C4alkoxy, carbonyl, C1-C4alkoxy, carbamoyl or SO2Y, R6 = H or

L11 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 Cl-C4alkyl, alk and alki are linear or branched Cl-C6alkylene, arylene is an unsubstituted or sulfo, carboxy, OH, Cl-C4alkyl, Cl-C4alkoxy- or halo-substituted phenylene or naphthylene radical, Y = vinyl or a radical CH₂CH₂U and U is a leaving group, Y1 = CH(Hal)CH₂(Hal) or C(Hal)=CH₂, where Hal is Cl or Br, W = SO₂NR₆, CONR₆ or NR₆CO, Q = O or NR₆, n = 0 or 1, and V1 and V2 = N, CH, CCl or CF. The prints obtained are distinguished by brilliant color shades and good all around properties.
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:659519 CAPLUS
 DN 123:58795
 TI Reactive azo dyes, their preparation and their application.
 IN Deitz, Rolf; Mueller, Bernhard; Trikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 38 pp.
 CODEN: EPXKDW
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 641839	A2	19950308	EP 1994-810480	19940822
EP 641839	A3	19950405		
EP 641839	B1	20000524		
R: BE, CH, DE, ES, FR, GB, IT, LI, PT				
ES 2147225	T3	20000901	ES 1994-810480	19940822
SG 49611	A1	20001121	SG 1996-1005	19940822
PT 641839	T	20001130	PT 1994-810480	19940822
US 5599911	A	19970204	US 1994-296206	19940825
JP 07082502	A2	19950328	JP 1994-205236	19940830
CN 1103084	A	19950531	CN 1994-115632	19940831
CN 1066176	B	20010523		
HK 1005555	A1	20010302	HK 1998-104759	19980602
PRAI CH 1993-2599	A	19930901		
OS MARPAT 123:58795				
GI				



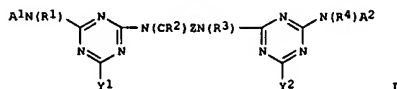
AB The dyes (I: A = azo, anthraquinone, phthalocyanine, formazan, or dioxazine chromophore; R, R1, R2 = H, optionally substituted Cl-4-alkyl; X = Cl, F, Br, 3-carboxy-1-pyridyl; 3-carbamoyl-1-pyridyl;
 XI, Z = as for X, OH, alkoxy, phenoxy, alkylthio, morpholino, substituted amino; m = 0, 1; n = 1, 2) are obtained from 2NHRI, cyanuric chloride or fluoride, an R2-substituted diaminobenzenesulfonic acid, an R-substituted aminosulfonaphthol, and the appropriate Z- and X1-substituted triazine.

I are suited for dyeing and printing of cotton and cellulosics. Thus, 7-(2-acetamido-4-aminophenylazo)-1,3,6-naphthalenetrisulfonic acid was condensed (1:1) with cyanuric fluoride and the product was condensed with 1,3-diamino-4-benzenesulfonic acid. The resulting aniline derivative was

L11 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 1-[4-(N-ethylanilino)-6-fluoro-1,3,5-triazin-2-ylamino]-8-hydroxy-3,6-naphthalenedisulfonic acid to provide a brilliant orange dye for cotton.

L11 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:489911 CAPLUS
 DN 122:268149
 TI Reactive dyes, their preparation and their use.
 IN Klier, Herbert; Mueller, Bernhard; Ruhlmann, Edmond; Trikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 40 pp.
 CODEN: EPXKDW
 DT Patent
 LA German
 FAN.CNT 2

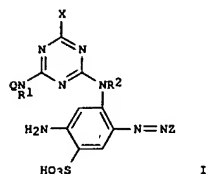
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 625549	A1	19941123	EP 1994-810276	19940509
EP 625549	B1	19980701		
R: BE, CH, DE, ES, FR, GB, IT, LI, PT				
ES 2119129	T3	19981001	ES 1994-810276	19940509
SG 49724	A1	20001024	SG 1996-4398	19940509
US 5552532	A	19960903	US 1994-242514	19940513
CN 1104662	A	19950705	CN 1994-105514	19940516
CN 1054868	B	20000726		
US 5684138	A	19971104	US 1996-657455	19960529
HK 1012661	A1	20000512	HK 1998-114025	19981218
PRAI CH 1993-1494	A	19930517		
CH 1993-1950	A	19930629		
US 1994-242514	A1	19940513		
OS MARPAT 122:268149				
GI				



AB The dyes I (A1, A2 = azo, anthraquinone, dioxazine, formazan, phthalocyanine chromophore; R1, R2, R3, R4 = H, optionally substituted Cl-4-alkyl; Y1, Y2 = halo, carboxypyridinium; Z = aliphatic bridging group) are obtained from A1N(R1)H, A2N(R4)H, halotriazine, and HN(R2)ZN(R3)H. I provide fast shades on printed or dyed HO- or N-group-containing fabrics. Thus, 1-amino-4-(3-amino-2,4,6-trimethyl-5-sulfonylphenyl)-2-anthraquinonesulfonic acid was condensed with cyanuric fluoride and ethylenediamine and then the Cu complex of 3-amino-3-[3-phenyl-5-(2-carboxy-5-sulfonylphenyl)-1-formezano]-4-hydroxybenzenesulfonic acid to give a dye which gave a fast brilliant blue shade on cotton.

L11 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:364086 CAPLUS
 DN 122:136095
 TI Triazine ring-containing fiber-reactive azo dyes, their preparation and use
 IN Deitz, Rolf; Trikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 55 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 623655	A1	19941109	EP 1994-810238	19940427
EP 623655	B1	19970716		
R: BE, CH, DE, ES, FR, GB, IT, LI, PT				
JP 07003176	A2	19950106	JP 1994-109115	19940426
JP 2914869	B2	19990705		
ES 2106484	T3	19971101	ES 1994-810238	19940427
SG 49634	A1	20000718	SG 1996-2050	19940427
US 5484899	A	19960116	US 1994-237478	19940503
CN 1103416	A	19950607	CN 1994-104166	19940505
CN 1055941	B	20000830		
PRAI CH 1993-1391	A	19930506		
OS MARPAT 122:136095				
GI				



AB Fiber-reactive dyes I [Q = residue of an azo, anthraquinone, triphenyldioxazine, phthalocyanine, or formazan dye; R1, R2 = H, (un)substituted Cl-4-alkyl; X = F, Cl, Br, 3-carboxypyridinio, 3-carbamoylpyridinio, (un)substituted amino, OH, Cl-4-alkoxy, OPh, Cl-4-alkylthio, morpholino, aryl, aralkyl; Z = aryl containing vinylsulfonyl or precursor or α-haloacryloyl or precursor group] give fast shades on cotton and are prepared by reaction of cyanuric halides with the appropriate amines. Condensation of cyanuric chloride with 1,3,6,7-(HO3S)3C10H4NH2 + 3-H2NC6H4NHCOOH2 and 2,4-(H2N)2C6H3SO3H and coupling of the product with diazotized 4-H2NC6H4SO2CH2CH2OSO3H gave

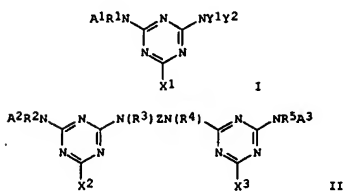
L11 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:450761 CAPLUS
 DN 117:50761
 TI Triazine reactive dyes and mixtures of dyes and their preparation and utilization
 IN Trikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 47 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 478503	A2	19920401	EP 1991-810734	19910917
EP 478503	A3	19921028		
EP 478503	B1	19970716		
R: BE, CH, DE, ES, FR, GB, IT, LI				
EP 735107	A2	19961002	EP 1996-109923	19910917
EP 735107	A3	19961009		
EP 735107	B1	20000830		
R: BE, CH, DE, ES, FR, GB, IT, LI				
EP 735113	A2	19961002	EP 1996-109924	19910917
EP 735113	A3	19970122		
EP 735113	B1	20001018		
R: BE, CH, DE, ES, FR, GB, IT, LI				
ES 2106070	T3	19971101	ES 1991-810734	19910917
ES 2150620	T3	20001201	ES 1996-109923	19910917
ES 2152455	T3	20010201	ES 1996-109924	19910917
US 5232462	A	19930803	US 1991-764555	19910920
JP 3389555	B2	20030324	JP 2000-171436	19910925
US 5451665	A	19950919	US 1993-48082	19930415
US 5612463	A	19970318	US 1995-456215	19950531
US 5735911	A	19980407	US 1997-775920	19970102
US 5892006	A	19990406	US 1997-997320	19971223
PRAI CH 1990-3077	A	19900925		
EP 1991-810734	A3	19910917		
US 1991-764555	A3	19910920		
US 1993-48082	A1	19930415		
US 1995-456215	A1	19950531		
US 1997-775920	A3	19970102		
OS MARPAT 117:50761				
GI				

L11 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 fast golden yellow dye for cotton.

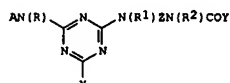
L11 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

AB The dyes are I-II mixts. or II alone [A1-A3 = residue of azo, anthraquinone, etc., dye; R1-R5 = H, (un)substituted Cl-4 alkyl; X1-X3 = F, Cl, Br, SO3H, carboxypyridinium; Y1, Y2 = H, organic group; Z = aliphatic or aromatic bridging group] and are obtained by simultaneous synthesis or mixing. The compns. are suitable for dyeing and printing of cotton. Thus, 7-(4-amino-2-ureidophenylazo)-1,3,6-naphthalenetrisulfonic acid was condensed 1:1 with 2,4,6-trifluoro-s-triazine at 0-5° and the product was treated with 1 mol of a mixture of 2,4-diaminotoluene and morpholine to give a mixture of a disazo dye and a morpholine azo dye, each containing fluorotriazine residues. The mixture provided golden yellow shades on cotton.



L11 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1992:428758 CAPLUS
 DN 117:28758
 TI Triazine-containing reactive dyes, their preparation and use
 IN Tsikas, Athanassios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 36 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 478504	A2	19920401	EP 1991-810735	19910917
EP 478504	A3	19921223		
EP 478504	B1	19970521		
R: BE, CH, DE, ES, FR, GB, IT, LI				
ES 2103791	T3	19971001	ES 1991-810735	19910917
JP 04272963	A2	19920929	JP 1991-245983	19910925
US 5268457	A	19931207	US 1992-999184	19921228
PRAI CH 1990-3076	A	19900925		
US 1991-764553	B1	19910920		
OS MARPAT 117:28758				
GI				



AB The dyes [I; ANHR = azo, anthraquinone, etc., dye; R, R2 = H, (un)substituted Cl-4 alkyl; R1 = H, (un)substituted Cl-4 alkyl, ZN(R2)COY; X = F, Cl; Y = nonreactive organic group; Z = aliphatic or aromatic bridging group] are obtained for dyeing and printing of cellulosic, especially cotton. Thus, 7-[4-amino-2-ureidophenylazo]-1,3,6-naphthalenetrisulfonic acid was condensed 1:1 with 2,4,6-trifluoro-s-triazine and the product was treated 1:1 with ethylenediamine. By condensation with Ac2O, a compound was obtained which dyed cotton in golden yellow shades.

L11 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1992:131115 CAPLUS
 DN 116:131115
 TI Tricolor reactive dyeing of cellulose-containing fibers
 IN Luttringer, Jean Pierre; Tsikas, Athanassios; Galafassi, Pierre
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 57 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

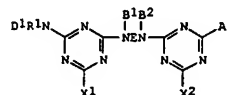
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 437184	A1	19910717	EP 1990-811025	19901221
EP 437184	B1	19940420		
R: BE, CH, DE, DK, ES, FR, GB, IT, LI				
ES 2052229	T3	19940701	ES 1990-811025	19901221
US 5071442	A	19911210	US 1991-638253	19910104
BR 9100053	A	19911022	BR 1991-53	19910108
JP 07048781	A2	19950221	JP 1991-983	19910109
PRAI CH 1990-57	A	19900109		
CH 1990-567	A	19900221		
CH 1990-1569	A	19900509		
OS MARPAT 116:131115				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title process uses red or reddish brown mono- or disazo dyes, yellow or orange monoazo dyes, and blue formazyl, diazo, or anthraquinone dyes of specified structure. Dyeing a cotton fabric with a dyebath containing 1.0 g/L yellow dye I, 0.2 g/L red dye II, and 0.5 g/L blue dye III at 100° and fixing in saturated steam at 101-103° gave a level, fast olive dyeing.

L11 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1992:131155 CAPLUS
 DN 116:131155
 TI Reactive dyes with two triazine rings, their preparation and use
 IN Tsikas, Athanassios; Seiler, Herbert
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 65 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

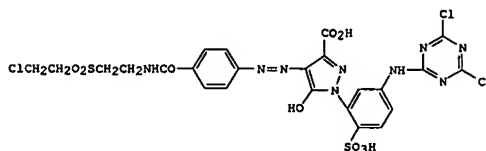
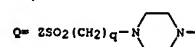
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 458743	A2	19911127	EP 1991-810362	19910510
EP 458743	A3	19921021		
R: BE, CH, DE, ES, FR, GB, IT, LI				
JP 04227970	A2	19920818	JP 1991-115822	19910521
PRAI CH 1990-1715	A	19900521		
OS MARPAT 116:131155				
GI				



AB The dyes [I; D = azo, anthraquinone, or heterocyclic dye residue; R1, B1, B2 = H, (un)substituted Cl-4-alkyl; X1, X2 = halo, SO3H, organic sulfonyl, carboxypyridinium; E = (un)substituted phenylenealkylene or phenyleneoxyalkylene; A = (un)substituted amino] are prepared for printing and dyeing of cellulosic fibers. Thus, tri-Na 7-[4-amino-2-ureidophenylazo]-1,3,6-naphthalenetrisulfonate was condensed with 2,4,6-trifluoro-s-triazine and the product was condensed with 4-(aminomethyl)aniline to give a reactive dye, which dyed cotton in golden yellow shades.

L11 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1987:498203 CAPLUS
 DN 107:98203
 TI Bifunctional reactive azo dyes
 IN Tsikas, Athanassios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 155 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

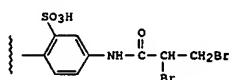
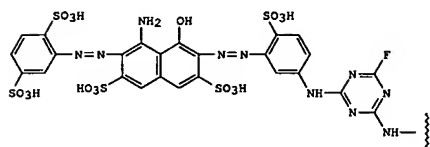
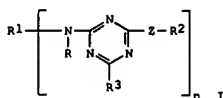
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 221013	A1	19870506	EP 1986-810427	19860929
EP 221013	B1	19900117		
R: BE, CH, DE, FR, GB, IT, LI				
US 4766206	A	19880823	US 1986-911176	19860924
BR 8604823	A	19870707	BR 1986-4823	19861003
JP 62161859	A2	19870717	JP 1986-234721	19861003
JP 08030152	B4	19960327		
PRAI CH 1985-4289	A	19851003		
GI				



AB The title compds. (RU)ND(X)z [D = monoazo-, polyazo-, metal complex azo-, anthraquinone-, phthalocyanine-, formazan-, azomethine-, dioxazine-, phenazine-, stilbene-, triphenylmethane-, xanthene-, thioxanthone-, nitroaryl, naphthoquinone-, pyrenequinone-, or perylenetetracarbinide-dye residue; R = ZSO2CH2Z1(Y)N(V)-, ZSO2(CH2)mO(CH2)pN(R1)-, ZSO2Z2NH2Z2NH-, Q: Z = sulfatoethyl, β-thiosulfatoethyl, β-phosphatoethyl, β-acetoxyethyl, β-haloethyl, H2C=CH; Z1 = Cl-6 alkylene; Z2 = C2-6 alkylene; V = H, (un)substituted Cl-4 alkylene, (un)substituted Cl-2 alkoxy, ZSO2CH2Z1(Y)-; R1 = H, Cl-6 alkyl; Y = H, Cl, Br, F, HO, HOSG3, Cl-4 acyloxy, CN, CO2H, Cl-5 alkoxy, carbonyl, carbamoyl, SO2Z; m = 1-6; p, q = 1-6; U = CO, SO2; X = an aliphatic, aromatic, or heterocyclic reactive residue; n, r = 1, 2] are prepared and are useful for dyeing or printing of textiles, especially cotton. Thus, diazotized 4-ClCH2CH2SO2CH2CH2NHCOC6H4NH2.HCl was coupled with 1-(5-amino-2-sulfophenyl)-3-carboxy-5-pyrazolone, and the yellow intermediate condensed with cyanuric chloride, forming I, which was used

L11 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:68720 CAPLUS
 DN 106:68720
 TI Reactive dyes
 IN Scheibll, Peter; Seitz, Karl; Seiler, Herbert; Tsikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 81 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 179019	A1	19860423	EP 1985-810463	19851009
	EP 179019	B1	19900516		
	R: BE, CH, DE, FR, GB, IT, LI				
	JP 61264062	A2	19861121	JP 1985-227975	19851015
	JP 06089263	B4	19941109		
	US 4801694	A	19890131	US 1987-73323	19870713
PRAI	CH 1984-4931	A	19841015		
GI	US 1985-785178	A1	19851007		

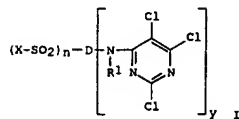


II

AB Reactive dyes I ($n = 1, 2$; $R = H$, Cl-4 alkyl; R_1 = organic dye residue of the monoazo, polyazo, metal complex azo, anthraquinone,

L11 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1986:554668 CAPLUS
 DN 105:154668
 TI Reactive dyes and their use
 IN Tsikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 56 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 167490	A1	19860108	EP 1985-810302	19850701
	R: CH, DE, FR, GB, IT, LI				
	JP 61062566	A2	19860331	JP 1985-146879	19850705
PRAI	CH 1984-3257	A	19840705		
GI					

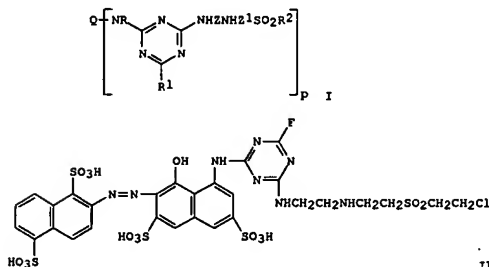


AB Reactive dyes I ($n, y = 1, 2$; $R_1 = H$, (un)substituted Cl-4 alkyl; $X =$ vinyl, β -sulfoethyl, β -thiosulfoethyl, $ClCH_2CH_2$, $AcOCH_2CH_2$; $D =$ residue of an azo, anthraquinone, phthalocyanine, formazan, azomethine, dioxazine, phenazine, stilbene, triphenylmethane, xanthene, thioxanthone, nitroaryl, naphthoquinone, pyrenequinone, or perylene-tetracarboximide dye) are produced in successive coupling steps, and give products useful in the dyeing and printing of cellulosic materials and fabrics. Thus, 1-amino-8-naphthol-3,6-disulfonic acid was neutralized and condensed with tetrachloropyrimidine. p-HO3SOCH2CH2SO2C6H4NH2 was diazotized and coupled with the condensation product to give the Na salt as a red powder, which dyed cellulosic fibers in fast bluish red shades.

L11 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 phthalocyanine, formazan, azomethine, dioxazine, phenazine, stilbene, triphenylmethane, xanthene, thioxanthone, nitroaryl, naphthoquinone, pyroquinone, or perylene-tetracarboximide series; $R_2 = CO_2$, SO_2 ; $Z =$ aliph., arom., or heterocyclic reactive group; $R_3 =$ an ionically cleavable substituent; $Z = NRS$, $N(R_5)NR_4$, $N(R_5)Z1NR_4$; $R_4, R_5 = H$, Cl-4 alkyl, Ph; $Z1 =$ (un)substituted aliph. or arom. bridging group], are useful for the dyeing or printing of cellulose contg. fabrics. Thus, 1-amino-4-(2,3-dibromopropionylamino)-2-benzenesulfonic acid was condensed with cyanuric fluoride, and the intermediate condensed with a disazo dye forming II, which dyed cotton a blue shade.

L11 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1986:170101 CAPLUS
 DN 104:170101
 TI Reactive dyes for cellulose and polyamides
 IN Tsikas, Athanasios
 PA Ciba-Geigy A.-G., Switz.
 SO Eur. Pat. Appl., 99 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 159292	A2	19851023	EP 1985-810140	19850329
	EP 159292	A3	19860108		
	EP 159292	B1	19880107		
	R: CH, DE, FR, GB, IT, LI				
	JP 60260659	A2	19851223	JP 1985-72486	19850405
	JP 06011869	B4	19940216		
	US 4782140	A	19881101	US 1986-914832	19861002
	US 4912244	A	19900327	US 1988-221404	19880719
PRAI	CH 1984-1718	A	19840405		
	US 1985-717747	A1	19850328		
	US 1986-914832	A3	19861002		
GI					



AB Reactive dyes (I) are prepared, where Q represents an anthraquinone, sulfophthalocyanine, formazan, phenazine, oxazine, nitroaryl, or especially a sulfo group-containing mono- or disazo dye radical; $R = H$, Cl-4 alkyl, CH_2CH_2CN , or CH_2CH_2OH , $R_1 = F$, Cl, Br, Cl-4 alkylsulfonfyl, $PhSO_2$, or SO_3H ; $p = 1$ or 2 ; Z and $Z1 = C2-6$ linear or branched alkylene; and $R_2 = 2$ -haloethyl, vinyl, $HO_3SOCH_2CH_2$, $HO_3S_2CH_2CH_2$, or $AcOCH_2CH_2$. Thus, reaction of cyanuric fluoride with H acid and then $ClCH_2CH_2SO_2CH_2CH_2NHCH_2CH_2NH_2$, followed by coupling of the product with diazotized 2,1,5-H2NC10H3(SO3H)2 gave II, a red dye for cotton. Numerous other I were prepared, most of them azo dyes.

=> d his full

(FILE 'HOME' ENTERED AT 13:26:33 ON 27 AUG 2005)

FILE 'REGISTRY' ENTERED AT 13:26:41 ON 27 AUG 2005

L1 STRUCTURE UPLOADED

D

L2 0 SEA SSS SAM L1

L3 1 SEA SSS FUL L1

FILE 'CAPLUS' ENTERED AT 13:27:27 ON 27 AUG 2005

L4 1 SEA ABB=ON PLU=ON L3

D QUE L4 STAT

D BIB ABS HITSTR

E TZIKAS ATHANASSIOS/AU

L5 124 SEA ABB=ON PLU=ON "TZIKAS ATHANASSIOS"/AU

E CLEMENT ANTOINE/AU

L6 20 SEA ABB=ON PLU=ON "CLEMENT ANTOINE"/AU

E LAUK URS/AU

L7 38 SEA ABB=ON PLU=ON ("LAUK URS"/AU OR "LAUK URS H"/AU)

L8 164 SEA ABB=ON PLU=ON L5 OR L6 OR L7

L9 30 SEA ABB=ON PLU=ON L8 AND ANTHRAQUINONE

L10 18 SEA ABB=ON PLU=ON L9 AND AZO

L11 16 SEA ABB=ON PLU=ON L8 AND (ANTHRAQUINONE(L)AZO)

D QUE L11 STAT

D 1-16 BIB ABS

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 AUG 2005 HIGHEST RN 861902-61-6

DICTIONARY FILE UPDATES: 26 AUG 2005 HIGHEST RN 861902-61-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*

* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer

to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE CAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Aug 2005 VOL 143 ISS 10
FILE LAST UPDATED: 26 Aug 2005 (20050826/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>